11. MORPHOMETRIC CHARACTERIZATION OF COCCIDIAN OOCYSTS FROM FORTY NATIVE ANIMAL SPECIES

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Faecal samples were collected from 1,238 native animals in southeastern Queensland and examined for protozoan parasites by centrifugal flotation. Coccidian oocysts were detected in 66 animals (5.3%) belonging to 40 different species. Oocysts were found in 4% of 122 mammals, 6% of 367 birds and 5% of 749 reptiles. Five genera of enteric coccidia were detected, *Eimeria* in mammals, birds and reptiles, and *Isospora*, *Caryospora*, *Cryptosporidium* and *Hoarella/Octosporella* in birds and reptiles. Comparative morphometric studies on sporulated oocysts indicated the presence of some 16 *Eimeria* spp. and 11 *Isospora* spp. Most species were found in individual host species except for 3 *Eimeria* spp., which were widespread among lizards, snakes and parrots, and one *Isospora* sp., which was found in several geckoes. Two *Cryptosporidium* spp. were detected, one in birds and one in snakes, and 3 *Caryospora* spp. were recorded, one in turtles, one in snakes and one in passeriform birds. *Hoarella/Octosporella* oocysts were only found in 2 insectivorous hosts and may represent spurious records of infection. The identification of coccidian species on the basis of oocyst morphology and host occurrence is not always reliable and underestimates species diversity.